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The effects of self-esteem stress upon the perception of self and others.

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The Effects of Self-Esteem Stress
Upon the Perception of
Self and Others

Ray K. McNamara

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THE EFFECTS OF SELF-ESTEEM STRESS
UPON THE PERCEPTION OF SELF AND
OTHERS

Ray K. McNamara

Thesis submitted in partial fulfillment of the requirements
for the degree of Master of Science

University of Massachusetts, Amherst

1958

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INTRODUCTION

The purpose of this study is to evaluate the effects of self-esteem stress upon the perceptions of self and of others. To ascertain these effects, two groups of subjects, matched on the basis of manifest anxiety level, sorted statements referring to perceptions of themselves and of others. The members of one group had been informed that they were maladjusted and the other group members had been advised that they were more or less normal. The sortings were based on a graduated dimension indicating how well these statements described the subject's conceptions of their own selves and of others.

How the individual reacts to self-esteem stress in his perceptions of self and of others has been recently investigated (16, 5, 8, 7, 19). Very little research has been conducted where the anxiety level of the subjects has been controlled, to ascertain how stress affects self perceptions and perceptions of others. For some of the theoretical formulations, the writer turned to two clinical-personality theorists who have made the self and its perceptions a central part of their approach to behavior. Sullivan, for example, indicates that one part of the personality (or in his terms, the self-system) evolves in order to secure the necessary satisfactions of living and to secure these satisfactions without incurring too much anxiety (35). Behavioral tendencies develop whose purpose is to reduce or minimize anxiety. Upon the basis of theoretical formulations (34, 35) and empirical

support (12), self-esteem stress presumably evokes anxiety which the stressed individual attempts to minimize.

When perceptions of the self and of others are called for at the time the individual is exposed to self-esteem stress, it is presumed that these perceptions will be influenced by operations to avoid and reduce anxiety. According to Sullivan, the individual attempts to keep out of his awareness, implications or meanings about himself that may lead to a lowering in his self-esteem. Hence, there may be greater focusing by the stressed individual upon the more favorable aspects of the self. In addition, in the theoretical system of Sullivan, the anxiety that is ostensibly aroused by self-esteem stress is usually converted into hostility. Hence, it is likely that the individual will have a more unfavorable view of others. In support of this, Sullivan adds that where there is much anxiety connected with one's own view of the self, there is then present the attitude of disparaging others.

Next the question is asked whether differences in manifest anxiety are related to the perceptions of self and others. In conformity with Sullivan's theory, the greater the manifest anxiety of the individual, the greater the need will be to maintain his current self perceptions. Sullivan indicates that people who are highly anxious and suffer a great deal, are utterly convinced that they need no change and are very resistant to new information about themselves. Hence, when high anxious individuals are exposed to disparaging but reliable information about themselves, they will be less likely to include this information in their pictures of themselves.

Having established a tenuous adjustment to himself, the high anxious person will be loath to attempt any changes that may disturb this adjustment.

It is the author's belief too that the high anxious individual will have less favorable perceptions than the low anxious individual. At this point it should be indicated that high and low anxious individuals are identified by means of the Taylor anxiety scale (36). Upon examining the content of this scale, the writer is impressed with one of its general themes, namely, unfavorable views of the self. On this basis he can indicate that the high anxious individual is inclined to perceive himself relatively unfavorably. But again, one must contend with his presumed need to maintain his adjustment in the face of experiences that are damaging to his self-esteem. His change in self perception, then, should be much less than the change evoked in the low anxious individual who is also faced with self-esteem stress. The author agrees with Sullivan that we all try to avoid unfavorable changes in our personality and that the high anxious individual is determined in this attempt.

Rogers has also made the self and its perceptions a central part of his approach to behavior (25). According to Rogers, the self, which is the nuclear concept in his theory, has the following properties: 1) it develops out of the individual's interactions with his environment; 2) it introjects the values of other people; 3) it strives for consistency; 4) it perceives experiences which are not consistent with the

preferred view of the self as threats; 5) it denies or distorts these threats. Thus Rogers postulates that it is the self which secures the necessary gratifications of living and works to gain these satisfactions with minimal anxiety involved. Rogers is of the opinion that threatening experiences will very often not be synthesized as part of the individual's self-concept. He states that under threat or stress, the person's organization of self becomes more rigid and accepts less and less of those experiences which are perceived as threatening. The threatened individual may consequently perceive himself more favorably than the individual whose self-concept is not threatened. Yet the person obviously cannot completely disregard these threatening factors of his environment, and thus in many cases these experiences may be expressed in indirect fashion, such as vague apprehensions and psychosomatic complaints. Hence, the high anxious person may be expected to report more maladjustment of a general nature, e.g., general feelings of inadequacy and apprehension. It is usually the high anxious individual who has been exposed to threat quite frequently. At the same time it is expected that this individual would be less apt than a low anxious individual to permit a threat to his self-esteem to affect his self-concept.

Further, it is a basic tenet of Rogerian theory that the perceptions of others, like those of the self grow out of the organism's interactions with his environment, i.e., as a result of evaluational interactions with others. Rogers postulates that when a person is able to accept into one consistent and integrated system, all of his sensory and visceral

experiences, then he is able to be more understanding of others and more accepting of them. A person who is defensive, according to Rogers, is more apt to feel hostile and less accepting toward others. It seems, according to Rogers, that the person has not organized effective methods for meeting the needs of the reality situation. The person dimly perceives discrepancies in himself, but he is too rigid to allow an objective evaluation of the experiences. Rather, vague feelings of apprehension and visceral upset arise.

In empirical support for his theoretical postulations, Rogers (26) found that in general, individuals who are sufficiently dissatisfied with their personality structure to request therapy, have certain characteristics in common. They have a generalized negative attitude toward themselves, feel more or less worthless, more anxious, less socially adequate, and lack positive goals for their lives and find it difficult to make decisions. At the same time, these highly anxious persons are unaware of many inconsistencies within themselves. They tend to judge experiences on an emotional level rather than on an objective one, and often deny to their awareness, certain attitudes which are inconsistent with their self-structure, and which are therefore anxiety provoking.

Rogers reports that the successful therapy case on the other hand, views himself in a more positive fashion, with more objective feelings about the self rather than emotional ones. He becomes more accepting of self and permits more experiential data to enter awareness. Objective data which may be threatening to his self-esteem are nevertheless symbolized and made

part of his self picture. It is possible that to the extent the individual is made less anxious by psychotherapy, to that extent is he able to tolerate reliable information that is threatening and to make considerable changes in his self picture.

Perception and stress: In an attempt to test the Rogerian hypothesis that the individual becomes rigid as a protective measure under stress, Combs and Taylor (6) studied the subject's ability to transform sentences into code under two different types of sentences: Those threatening to the self, and neutral sentences. The results supported Rogers' theory; the threatening sentences took longer to code, and resulted in more errors. Bruner and Postman (2) found that words representing some personal threat, tended to be perceived either more quickly or more slowly than neutral words, whereas words representing positive values were perceived at shorter intervals. Hanfman (11) feels that this slow perception may serve a defensive function of blocking out the potentially dangerous environment. She feels the alternative quick perception of threat may represent an alerting effect of lesser degrees of anxiety; on the other hand, it may be concomitant of acute anxiety which appears when the defenses break down.

Kates (16) endeavored to induce one group of subjects to view themselves favorably by advising them that they were well adjusted, while in another group of Ss he induced a less favorable self-regard by advising that they were poorly adjusted. The measure of change in the subjects' conceptualization of themselves was their ratings of the disturbance values

of annoying social situations. It was assumed, if these annoying social situations were evaluated as significantly less disturbing by Ss who were advised that they were well adjusted, then it could be concluded that their self-conceptualization had been favorably altered. A similar assumption in the reverse direction was made for those Ss who were told they were poorly adjusted. Significant differences were found between the two ratings made by the "well adjusted" experimental group, i.e., those subjects who were advised that they were well adjusted did evaluate annoying social situations as less disturbing than prior to such advisement. The "poorly adjusted" experimental group and the control group did not change relative to the "well adjusted" group. Kates concluded that subjects, when described as well adjusted by others, will conceptualize themselves favorably; these conceptualizations probably include feelings of power in social relations.

For the fact that those Ss advised as poorly adjusted did not change in their ratings of social situations, Kates offers alternative solutions. They may have conceptualized themselves unfavorably, but did not permit these unfavorable conceptualizations to affect their evaluations of annoying social situations. The second alternative is that the Ss did not conceptualize themselves unfavorably because they had either rejected or distorted such descriptions. Since there was no change in their conceptualizations of themselves, the Ss did not revise their evaluations of annoying social situations.

Following Rogers (25) and Snygg and Combs (32), Chodorkoff (5)

describes defensiveness as primarily a perceptual phenomenon which follows as a consequence of threat to the individual's self. As a result of threat, aspects of the individual's environment and of the person himself may be denied to awareness or be misperceived. By this means, the individual is able to insure the stability of his self. Defensiveness in perception of the self was studied by means of a Q sort of self-descriptive statements. Defensiveness in terms of the environment was studied by means of the tachistoscopic presentation of neutral words and personally relevant threatening words.

In an experiment split into three sessions, the subjects completed a biographical inventory, were administered a word association test and thematic apperception test and then were given a perceptual defense procedure. The words in the word association test with the longest reaction times, i.e., those words regarded as having emotional impact, and those words having the shortest reaction times, or neutral words, were used in the perceptual defense procedure. Following this procedure, the S performed a Q sort of cards with instructions to sort them to describe himself.

Here, the author wishes to make an explanatory note regarding abbreviations which will be utilized from time to time throughout this report. TAT will refer to the thematic apperception test. HA and LA will refer to subjects who are high and low in manifest anxiety respectively. MAS will refer to the Taylor manifest anxiety scale. Finally, MMPI will refer to the Minnesota Multiphasic Personality Inventory.

The biographical inventory, Rorschach, word association

test and TAT were interpreted by judges, and then the Q sort items were sorted by judges to describe the S as they saw him. Chodorkoff made the following hypotheses:

1. The greater the agreement between the individual's self description and an objective description of him, the less perceptual defense he will show.

2. The greater the agreement between the individual's self description and an objective description of him, the more adequate will be his personal adjustment.

3. The more adequate the personal adjustment of the individual, the less perceptual defense he will show.

All three hypotheses were supported. In addition, Chodorkoff found that eleven Ss were able to recognize the threatening words more quickly than the neutral words. Ten of these eleven Ss were among the fifteen who had the highest accuracy of self-description scores, and eight of the eleven were among the fifteen Ss with the highest adjustment scores. Chodorkoff suggests the following formulation: the better adjusted individual attempts to obtain mastery over threatening situations by getting to know, as quickly as possible, what it is that is threatening. The more poorly adjusted individual, on the other hand, may try to keep the threat from becoming adequately symbolized.

Levanway (19) studied the effect of stress on expressed attitudes toward self and others. He referred to studies (24, 29, 33) in which there was general agreement that clients who were judged to have made progress in therapy increased the number of positive statements and decreased the number of

negative statements they made about themselves and others during the course of therapy. Levanway assumes that since one measure of progress in therapy is the client's reported experiencing of less stress, this suggests that reduction in stress is associated with the expression of more favorable attitudes toward self and others. Carrying this thought further, Levanway assumes that experimentally increasing the amount of stress should effect a lowered evaluation of self and others. However, a pilot study gave results in the opposite direction.

To test this further, the author administered a series of tasks to subjects in a pre-stress phase; the tasks were self-rating, rating of others and a picture sorting task. In the stress phase, individual subjects were given a series of word lists to memorize and recall, following which they were stressed by the experimenter who told them that the pattern of words in their recall was indicative of emotional conflict. Immediately following stress, the Ss were given the same three tasks as in the pre-stress phase. In line with the results of his pilot study, Levanway predicted that following the introduction of stress, Ss would a) express liking for more pictures of people; b) rate others more favorably and c) make significant changes in their self-ratings.

All these hypotheses were supported at the .01 level of confidence. A secondary finding was a positive correlation between self-ratings and ratings of others, both before stress (.74) and after stress conditions (.77). These results then are in direct contradiction to what one would expect on

the basis of previous studies. Levanway suggests two alternative explanations. In the previous studies, all Ss were in therapy. This was not the case in his study and this difference in experimental subjects may account for the contradictory results. Levanway suggests that the more significant fact may be that changes in attitudes about self and others were responsible for changes in the degree of stress perceived. If this were the case, then there is no essential contradiction between the results of this study and the previous ones.

These results are, however, not out of line with the theories of Rogers and Sullivan regarding the defensive behavior of an individual under stress. One will recall that Rogers suggests that threatening experiences will very often not be synthesized as part of the individual's self-concept. He states that under threat, the individual's organization of the self becomes more rigid and as a result he accepts less and less of those experiences which are perceived as threatening. Sullivan, on the other hand, theorized that when perceptions of the self and of others are called for at the time the individual is exposed to self-esteem stress, it is presumed that these perceptions will be influenced by certain security operations. Presumably, the individual attempts to keep out of his awareness, implications or meanings about himself that may lead to a drop in his self-esteem.

In line with these theoretical explorations, Gerard Haigh (12) studied the defensive behavior of patients who were in client-centered therapy. The author assumed two

principles in formulating his overall hypothesis. One, that the recognition by the client of acceptant counselor attitudes should lead to a decrease in defensive behavior. The second principle is that, as the client proceeds to explore himself at deeper and deeper levels during the course of therapy, he uncovers inconsistencies in himself while at the same time he is working them through to a solution. Putting these two principles together, Haigh expected that he would find a decrease in the frequency of defensive behavior during the course of client-centered therapy. Haigh did in fact find this decrease to be significant at the 5 percent level of confidence. Similarly, a proportional increase in awareness of defensiveness was found in the group showing a decrease in defensiveness. Therefore, from this study it appears safe to conclude that when a person's self-concept is under stress, he is more apt to be defensive than when there is no stress. Thus, Levanway's finding that self acceptance went up following self-esteem stress could find explanation in the theories of Rogers and Sullivan, supported by Haigh's findings.

Levanway's finding of increased acceptance of others following self-esteem stress, however, is not to be expected from Sullivan's theory. Sullivan hypothesized that the anxiety aroused by self-esteem stress is converted into hostility toward others and thus there should be a drop rather than an increase in positive feelings toward others. This finding would be likewise expected from Rogerian theory. It is possible that either of Levanway's alternative explanations is sufficient, i.e., either a difference in experimental

sample, or that changes in the degree of stress perceived were the results of changes in attitudes about self and others rather than vice versa. In any case, this study will attempt in part to throw further light on this question--to determine whether or not this type of result is to be expected.

Leonard Diller (7), in an attempt to bring the self-concept under more direct experimental attack than had previously been the case, performed an experimental study in which conscious and unconscious self-attitudes after success and failure were studied. Four main questions asked by Diller were: 1. What are the effects of success and failure on attitudes toward the self; 2. Is there any difference between overt and covert behavior with regard to this problem; 3. What are the effects of success and failure on attitudes toward others; 4. Does the degree of closeness of the other person to the self affect the extent of change in attitudes. The overt attitudes of the subjects were measured by a seven-point scale consisting of ten personality traits. Each S rated himself and twelve friends on this scale. Covert attitudes were measured by obtaining the S's responses to samples of handwriting presented to him in a disguised fashion. On each occasion, one of the samples was his own. The subject was asked to give a free personality description of each sample, to rate each sample on the same seven-point rating scale as used in obtaining overt attitudes, and to rank the four samples in order of attractiveness.

Three groups of subjects were used: a success group, a failure group and a control group. The control group merely

performed the overt and covert attitude measures on two separate occasions. The success and failure groups were administered an intelligence test between tasks, and, depending upon the group they were in, were given a positive or negative evaluation of their intelligence test results prior to the second administration of the attitude scales.

Diller reports that, after failure, there were no significant changes in self-ratings of intelligence nor in self-ratings of the various personality traits on the overt scale. There were also no significant changes in self-ratings of intelligence on the covert scale, but there were significant decreases on the covert scale in self-estimates of personality traits. With regards the ratings of friends, no significant changes on either the overt or covert scales were found. After success, Diller found a significant rise in self ratings on the overt rating scale of personality traits, while on the covert side, no differences occurred. Ratings of friends after success showed a significant rise in the overt rating scale for the personality traits. However, no changes were found in ratings of intelligence on the overt scale, nor on either rating on the covert scale. Diller concludes that changes which accompany self-esteem stress, may be greater in aspects of personality which superficially bear little resemblance to the valued trait with which stress was concerned than in the rating of the valued trait. Diller believes, that after a failure experience, the S who exhibits no change in his overt attitudes while his covert attitudes reflect diminished self-esteem, is defending the integrity

of his self image by concealing his attitude changes from the examiner. Diller feels that this defense is a conscious one, since the overt attitudes are under conscious control, while the covert ones are not. The failure then to find changes in the overt attitudes of the subjects was the result of their conscious defenses.

Diller also concluded that the theory that attitudes toward others covary with self-attitudes is substantiated by the responses obtained from the success group where ratings of all friends rose, and ratings of close and ordinary friends changed more than did the ratings of casual acquaintances. After failure, however, Diller found a reverse relationship--i.e., after failure, an individual may either raise his self esteem while lowering his evaluation of close friends or he may lower his own self esteem while rating his friends higher. Diller concluded then that the generalization or spread of self attitudes to others does not occur after a failure experience. This latter result is in opposition to what one would expect from Levanway's (19) results who, one will recall, found that attitudes toward others as well as toward self, were more favorable following self-esteem stress. Once again, this study will attempt to clarify this apparent note of contradiction.

Doris and Sarason (8) attempted to determine a) whether the direction of blame assignment in a failure situation varies with the level of anxiety of the testee, and b) with repeated failure whether the groups differ in the constancy with which they blame the self or other-than-self. Doris

and Sarason predicted that the high anxiety (HA) subjects would blame themselves more in a failure situation than the low anxiety (LA) subjects.

Subjects were selected on the basis of a test-anxiety questionnaire. Each S was presented with eight performance items taken from various standard intelligence scales. The situation was so arranged that S would pass four and fail four of the tests. After success or failure on a test, S was asked to rank in order of their relevance, some items that might have contributed to his success or failure as the case might be. The authors selected items that would express blame for failure either toward the self or toward the examiner and the testing situation. The results showed a significant difference between HA and LA on their mean self-blame score for one order of presentation of the test items, but not for the reverse order. The main hypothesis, however, was supported, i.e., HA Ss did tend to blame self more than the LA, although this was upheld on only one order of presentation of the test items. Hence, HA Ss may blame themselves more frequently and have less favorable self concepts.

Relation between acceptance of self and acceptance of others: The theories of Sullivan and Rogers postulate that there is a relationship between how a person perceives himself and how he perceives others. Both theorists point out that, in general, when a person has positive attitudes toward himself, he will in turn have positive attitudes toward others, but when under stress, while the attitudes toward self may remain positive due to defenses, the attitudes toward

others will be expected to be less positive. Levanway (19), it will be recalled, did not find this to be the case. In a study of this relationship at the Counseling Center at Chicago, Sheerer (29) found that over the course of therapy, there was a marked and fairly regular increase in the measured acceptance of and respect for self. There was also a marked, but more uneven, rise in the acceptance of others from the beginning to the end of therapy. Sheerer also concluded that the correlation between attitudes toward the self and toward others was "definite and substantial" (p.174).

In a parallel study at Chicago, Dorothy Stock (33) investigated the interrelations between the self concept and feelings toward other persons and groups. Using a Pearson product-moment coefficient, and correlating only those interviews in which the number of statements on which the average was based was greater than ten, Stock found a positive correlation of .66. Stock concluded that the results indicate that a positive relationship exists between the way a person feels about himself and the way he feels about others. She points out that an individual who holds negative feelings toward himself tends to hold similar feelings toward others, and his feelings about himself change to objective or positive, feelings about others change in a similar direction.

Studies in support of these conclusions were done by Berger (1) and Omwake (22) who concluded that there is a positive relationship between the way a person feels about himself and the way he feels about others. This study will attempt to throw further light on this question, relating the

variables of stress and anxiety.

The measures--SIO Adjustment Scale: In this study, the perception of self and others will be operationally defined by the adjustive scale of the SIO sort as developed by Rogers and Dymond (26). These authors reported very significant changes in attitudes of patients toward themselves and toward others after therapy. The SIO method in evaluating these changes was to have the subject perform a "Q" sort of himself and of others. The rationale behind this method was the Rogerian theory that "the self-concept consists of an organized conceptual pattern of the 'I' or the 'me', together with values attached to these concepts. This implies that many single self-perceptions, standing in relation each to the other, exist for the same individual. It is quite possible for the individual to order these self-concepts along a subjective or psychological continuum from 'unlike-me' to 'like-me'" (26 p.55).

In another report on the same project, Rudikoff (26, ch.3) reported changes in the perceptions of others as well as the self, the perception of the self, however, undergoing the greatest change. Both changes were in a positive direction, responding favorably to therapy.

In an attempt to study whether the changes in self-ideal correlations over therapy were indicative of "real" improvement or merely a change in the frame of reference, Dymond (26, ch. 5) devised a "Q" sort adjustment scale to provide an external criterion of adjustment level. This scale was based on the SIO sort test devised by Rogers and Dymond. A

group of statements from the SIO sort was given to several clinical psychologists who indicated those statements the well-adjusted individual would say are like him, and those he would say are unlike him. This selection resulted in 74 "valid" items, 37 in the "well adjusted" category and 37 in the "unadjusted" category. The SIO score included counting adjustive items indicated as like the S and unadjusted items marked unlike the S.

By means of this adjustment scale, it is believed that we may be enabled to achieve an objective score respecting the individual's attitudes toward himself and toward others. Scores on this scale enable us to determine how well adjusted the person perceives himself to be. This scale also allows one to assess the subjects' perceptions of others in terms of the favorability of their personal adjustment.

In her study relating the adjustment scale to gains made in personal adjustment over therapy, Dymond found that the therapy group at pretherapy were significantly less adjusted than controls who did not request therapy. There was no change in either group over a wait period of 60 days. However, after therapy, the mean adjustment score of the total experimental group was significantly (.01) higher than it was at pretherapy, and this improvement was maintained during a follow-up period. There was not, however, a comparable change in the control group over the same length of time.

The reliability of this scale was estimated by the test-retest method. Since the experimental group was expected to change over time and the controls were not, the reliability

was based on the stability of the control group. Dymond reports that the adjustment scores of the control group from post-therapy to follow-up had a reliability of .86. The validity of the measure depends to a large degree on how well this scale agrees with other measures of improvement on which the subjects were tested. Dymond reports that the rank-order correlation between the "Q" sort adjustment score of two groups of twenty-three therapy subjects at pretherapy was .83, and the rank order of these same subjects at post-therapy was .92. Dymond also reports that the relationship between the subject's "Q" adjustment score and the rating of improvement over therapy by the therapist was significant at better than the .05 level. Finally, Dymond reported (ch. 8) that a correlation study between the "Q" sort adjustment score and the Thematic Apperception Test rating gave similar results, i.e., the TAT records of subjects presenting themselves for therapy were judged blindly to be more disturbed than those of a control group. Over the course of therapy there was a significant change for the experimental group as a whole in a positive direction, which did not occur in the control group over a matched period of time. Dymond reported that the "Q" sort adjustment scale and the TAT ratings had a product-moment correlation at pre-therapy of .63 and at post-therapy of .47, both of which were significant at better than the .05 level, showing, according to Dymond, that the two criteria demonstrated change of the same extent and direction. Thus from these results it appears that the "Q" sort adjustment scale is a valid and reliable measure for assessing the

general adjustment level of a subject.

Taylor Manifest Anxiety Scale: The anxiety level of the subjects in this experiment will be operationally defined by the Taylor Anxiety Scale (35). The MAS was developed from items on the MMPI which were judged to be indicative of anxiety. The resulting scale was composed of fifty key items with 175 buffer statements. In a test-retest check on reliability, Hedlund, Farber and Bechtoldt (13) found the correlation to be .82. Hilgard, Jones and Kaplan (14) found an odd-even reliability of .92. In an eyelid conditioning experiment, Taylor found a test-retest reliability of .89 (36).

In a validation study of the MAS, Hoyt and Magoon (15) had experienced counselors make judgments as to the degree of manifest anxiety present in clients they had recently seen. Following these judgments, the subjects were given the Taylor MAS. It was concluded that there were highly reliable differences between scores made by clients judged to be "high anxious" and those judged to be "low anxious" or "medium anxious" by the judges. Similar results are reported by Gleser and Ulett (10) who correlated the Taylor MAS and the Saslow Screening test with ratings of psychiatrists on anxiety proneness, and found both to correlate well. The former correlated .61, while the latter correlated .55 with the psychiatric rating of anxiety proneness and symptoms of anxiety and apprehension. Further, in an unpublished thesis by Lauterbach, as reported by Goodstein (17), Lauterbach reported a significant correlation between anxiety scale scores and psychologists ratings of overt anxiety. However,

the correlation with psychiatrists' ratings was not significantly different from zero.

In a study by Buss et al (3), the authors reported that clinical judgments of anxiety, apprehension and generally poor personality structure, correlated .60 with the Taylor MAS. In addition, the subject's subjective reports of sweating, flushing, excessive swallowing and palpitation of the heart correlated .68 with the MAS, while general feelings of tenseness correlated .52. In a follow-up by Buss (4), the author reported that Ss scoring high on an anxiety scale were judged to be significantly higher in apprehension, worry, tenseness and general nervousness. Siegman (31) found the MAS to correlate .34 with a manifest anxiety rating scale, significant at the .01 level of confidence. Siegman hypothesized that the low correlation was due to the fact that the Taylor MAS contains many items referring to chronic manifestations of anxiety. In addition, Siegman found the MAS to correlate -.72 with scores on a self-esteem scale, also significant at the .01 confidence limit. These results tend to support the proposition that a person scoring high on an anxiety scale will tend to be judged as manifestly anxious and probably as having feelings of inadequacy.

Statement of the problem: This study attempted then, to determine generally, the effects of self-esteem stress upon the subject's perception of self and others. Because the anxiety level of the subject has been presumed to have an effect upon his reactions to stress, the author introduced anxiety level as a control variable. This study investigated

the relationship between anxiety level and perception of self and of others, and the effect of the interaction between anxiety level and stress upon perception of self and others. Furthermore, it evaluated the relationship between perception of self and others. Finally, this study was concerned with determining whether stress affects perceptions of self and of others in a differential manner.

Hypotheses: 1. With regard to the control variable of anxiety level, this writer tested the null hypothesis that the level of anxiety would not affect perceptions of self and others.

2. It was hypothesized that perception of the self would not be significantly lower in level of adjustment for subjects who were exposed to self-esteem stress than for subjects who were not exposed to this stress. The null hypothesis was taken since the empirical evidence is unclear as to whether self-esteem stress does in fact lower a person's evaluation of self (7, 8, 16, 19).

3. The perception of others in terms of their adjustment would not be significantly lower for subjects who receive self-esteem stress than for subjects who did not receive this threat to their self-esteem. Reports of investigations of this question have given conflicting results (7, 19).

4. With regard to the acceptance of the Rorschach evaluation, the author tested the null hypothesis that neither anxiety level nor stress would affect the extent to which a subject accepted this evaluation.

METHOD

First, the author would like to describe briefly the experiment. All subjects had been given the Taylor MAS prior to the actual experiment. Eighteen subjects were selected from the upper twenty-five percent level of the scale and eighteen from the lower twenty-five percent. Eighteen female subjects were given a spurious personality description, presumably based on their Rorschach test, indicating that they were very poorly adjusted. Nine subjects were high in manifest anxiety level with the other nine subjects low in manifest anxiety level. After reading these personality descriptions, the eighteen subjects sorted statements first pertaining to themselves and then to others. These two sorts were modified "Q" sorts. After they completed the two "Q" sorts, the subjects were advised that their personality descriptions were false.

Another group of eighteen subjects, nine high and nine low in manifest anxiety, were also given a spurious personality description, again ostensibly based on the Rorschach test, which indicated that the subjects were more or less normal in their personal adjustment. These subjects followed the procedure of first sorting statements relating to themselves and second, relating to others. Upon completion of these sorts, the subjects were told that their personality descriptions were false.

Subjects: Two groups, each consisting of eighteen subjects were randomly drawn from the upper and lower twenty-five percent of the Taylor Manifest Anxiety Scale distribution, which was administered to several sections of the introductory psychology classes at the University of Massachusetts. As a limiting factor, all the

subjects were female members of these classes. The major reason for such a limitation in subject population was to control for any variation related to sex. An attempt was made to insure that all thirty-six subjects were free from environmental stress, as evaluated by an interview and questionnaire. This additional limitation on the choice of subjects was introduced to minimize stress not directly under experimental control.

Procedure: Level of anxiety was operationally defined by scores on the Taylor MAS. As stated above, this was the initial basis for selection of subjects.

The thirty-six subjects selected to serve in this experiment met for two sessions.

1. In the first session, all Ss were tested with the group Rorschach test. These protocols were evaluated by two clinical psychologists as an additional measure to insure that the subjects chosen would be relatively able to tolerate self-esteem stress. Any subjects found unsuitable were not included in the experiment.

2. At the end of the first session with the group Rorschach test, the group was told that their Rorschach records were to be evaluated by the experimenter and other clinical psychologists as a rating of their "level of adjustment" in order that he might select some of them for a future experiment. The experimenter then told the subjects that these "confidential records" would be made available to those subjects chosen for the second experimental session, and that they would be distributed at that session.

3. The "high anxious" and "low anxious" groups were each randomly divided into two additional groups--an experimental and control group. Within two weeks following the administration of the group Rorschach test, the thirty-six subjects were recalled in groups of approximately ten subjects each.

4. In the second session, each subject received her "confidential evaluation" of her Rorschach test which was described as "a measure of your general adjustment". The predetermined experimental group received a typewritten negative evaluation of their adjustment (Appendix A), while the control group received a neutral evaluation (Appendix B).

5. Following a short period in which each subject was given time to read her "evaluation", the subjects were requested to perform the adjustment Q sort developed by Rogers and Dymond (25), in which the individual sorted seventy-four statements according to whether she felt they were "like me" or "unlike me". This sort was also performed by each subject indicating whether the same seventy-four statements were like or unlike the "average" person.

Instead of requiring a sort on a scale of nine as did Dymond, this study required a sort on a scale of six. The reason for this slight innovation is that unlike Dymond, this study was not concerned with direct correlations of the Q sort for which the scale of nine was needed. The scale of six was required here in order to insure against any "set" which the subject might acquire toward positive or negative sorting. The adjustment scores for the Q sorts were determined according to Dymond's method.

Throughout both experimental sessions, the experimenter was unaware of the subject's manifest anxiety level. In order to minimize differential treatment of the two groups, both experimental and control subjects were included in each session of the experiment proper. Also, the experimenter made minimal contact with the subjects until the experiment was completed.

6. Following the conclusion of the experiment, the subjects were given a complete explanation of the experimental procedure plus its purpose.

RESULTS

Means and standard deviations of "Q" adjustment scores for each of the four treatment groups are presented in Table 1. F tests indicated the variances to be significantly different from each other and thus heterogeneous. Transformations of the data by means of the square roots of the raw scores and also the use of the logs of these scores failed to reduce the heterogeneity; therefore, the raw data were used with the knowledge that the heterogeneity would require a higher level of significance in the interpretation of the results. In accordance with the suggestion of Lindquist (19) the "apparent" level of significance will be raised from .05 to .01 in order to make allowance for the heterogeneous variance.

Analysis of variance (2) was used to determine whether anxiety level and self-esteem stress had any effect on the perceptions of self and others (Table 2). The first analysis indicates that anxiety level as measured by the Taylor MAS did not have a significant effect on the combined perceptions of self and others. The second analysis similarly indicates that self-esteem stress failed to have a significant effect on the combined self and other perceptions as measured by the "Q" adjustment scale. The interactions of anxiety level and self-esteem stress with adjustment scores were likewise insignificant.

The second section of Table 2 contains the within-groups analysis of variance which indicates the effects of stress and anxiety level on the manner in which the subject perceived his own adjustment as compared to the way in which he perceived

the adjustment of others. The first analysis indicates that, in general, subjects perceived others as being better adjusted than themselves, regardless of anxiety level or whether or not they were subjected to self-esteem stress. This perception of general superiority of the adjustment of others over self was significant at the .05 level of confidence. In view of the heterogeneous variance, however, this level of significance has been raised to the .01 level. Hence, this F of 4.27 is not significant and therefore must be regarded only as a trend. Neither anxiety level nor self-esteem stress were associated with any significant differences between adjustment scores for self and adjustment scores for others. Interactions of anxiety level and stress did not produce any significant differences between adjustment scores for self and for others.

In view of the fact that the analyses of variance of the main treatment effects and their interactions failed to reach significance, the treatment effects were not broken down into their simple effects.

The analysis of variance was used to determine whether the subjects in this experiment accepted the bogus evaluation of their Rorschach protocols. This analysis is summarized in Table 3 together with the means and standard deviations of these ratings in Table 4. Neither anxiety level, self-esteem stress nor their interactions produced significant differences in these ratings. These analyses, plus the means and standard deviations indicate that all groups accepted the evaluations equally well. This analysis does not permit rejection of the null hypothesis that anxiety level and stress would have no effect on the subject's acceptance of the stress to her self-esteem.

Table 1

Means and standard deviations of "Q" adjustment scores
for self and others

		Self		Other	
		Mean	S.D.	Mean	S.D.
Stress	HA	50.88	15.81	59.66	8.83
	LA	55.44	11.52	60.22	5.78
Non stress	HA	54.66	8.72	58.88	5.49
	LA	61.11	7.99	59.88	8.61

Table 2

Analysis of Variance of the effects of Self-esteem
Stress and Anxiety level on the "Q" Adjustment scores
for Self and Others

Source	df	SS	MS	F
Between-Subjects				
(A) Anxiety	1	177.34	177.34	1.57
(S) Stress	1	78.12	78.12	.69
AS	1	6.13	6.13	.05
error (b)	32	3600.23	112.50	
Total	35	3861.82		
Within-Subjects				
(Adj) Adjustment	1	308.34	308.34	4.27*
A Adj	1	100.36	100.36	1.39
S Adj	1	125.36	125.36	1.73
AS Adj	1	2.33	2.33	.03
error (w)	32	2307.11	72.09	
Total	36	2843.50		

*Significant at .05 level.

Table 3

Analysis of Variance of Subject's Ratings of
Rorschach Test Evaluations

Source	df	SS	MS	F
(A) Anxiety	1	1.36	1.36	.30
(S) Stress	1	8.03	8.03	1.81
AS	1	1.36	1.36	.30
(between subjects)	(3)	10.75		
error (w)	32	141.56	4.42	
Total	35	152.31		

Table 4

Means and Standard Deviations of Subject's Ratings of
Rorschach Test Evaluations

	Stress		Non-stress	
	Mean	S.D.	Mean	S.D.
HA	7.77	2.07	8.33	.97
LA	7.00	1.77	8.33	1.44

In order to determine whether there was any correlation between how well the subject accepted the Rorschach evaluation and the difference between her self and other adjustment scores, the Kendall Rank Correlation Coefficients (30) were computed for each of the four groups (Table 5). The correlation for the HA stress group was .68 which is significant at the .01 level of confidence. The correlations for the other three groups were not significant.

The correlation of .68 for the HA stressed group indicates that for this group of subjects, the degree to which a subject accepted the evaluation of her Rorschach protocol may be related to the difference between her estimate of the "average" person's adjustment and her own adjustment. That is, the more a subject accepted the stress evaluation, the poorer was her own perceived adjustment as compared to her perception of the adjustment of others.

Table 5

Kendall Rank Correlation Coefficients Between Differences
Between Self and Other Scores and the Subject's Rating
of the Rorschach Evaluation

Subject group		r
Stress	HA	.68*
	LA	.33
Non-stress	HA	.03
	LA	.26

*Significant at .01 level.

DISCUSSION

The finding that anxiety level failed to have an effect upon the subjects' perceptions of selves and others does not permit rejection of the null hypothesis that this control variable has no significant effect. This result is in partial contradiction to the findings of Doris and Sarason (S) who reported that for one order of test item presentation, high anxious subjects tended to blame solves more than others in a "forced" failure situation. A similar result, however, was not found in a second study by Doris and Sarason in which the order of test item presentation was reversed and the order of pass-fail was changed. The authors concluded that one procedure was more frustrating than the other and that significant differences between high anxious and low anxious subjects occurred in the more frustrating procedure. It is possible that significant differences might have been found in this study had its procedure been more frustrating. It may be also that the perception of the general adjustment level of self and of others is less susceptible to change than is a subject's blame assignment following a transitory failure stress.

Like anxiety level, self-esteem stress failed to have a significant effect on the perceptions of self and others. The interaction of anxiety level and self-esteem stress was also insignificant. Hence, controlling for anxiety level in itself, does not add any precision to the investigation of the effects of self-esteem stress upon the subject's perception of himself or of others.

The within-groups analysis of variance found in the second half of Table 2, indicates that the subjects of this experiment, regardless of anxiety level or of self-esteem stress, tended to perceive others as somewhat better adjusted than themselves. Due to the marked heterogeneity of the scores, this result, which does not reach significance at the .05 level, can be regarded only as a trend.

The analysis of the interaction of anxiety level with the difference between self and other scores was not significant, indicating that the trend to perceive others as better adjusted than selves was not related to anxiety level. In other words, a subject's level of anxiety has little or no effect upon differences between the perceptions of self and the perceptions of others.

Self-esteem stress likewise did not interact with differences between the perceptions of self and others to produce significant results. This indicates that self-esteem stress also, did not affect any differences between perceptions of self and others.

The interaction of anxiety level and self-esteem stress with differences between perceptions of self and others were also not significant, indicating a conclusion similar to the two above.

These results are in general agreement with those of Kates (16) who found that self-esteem stress failed to increase the subject's disturbance value of annoying social situations. They agree also with those of Diller (7) who was unable to

decrease overt ratings of intelligence or personality traits by subjecting subjects to self-esteem stress. The latter's report of possible conscious defensiveness on the overt scale for the stressed trait, may be a partial explanation for the lack of significance in the results of this study, i.e., the stressed groups may have defended against any lowering of their self-esteem.

The failure to find significant differences between stressed and non-stressed groups is in contradiction to the findings of Levanway (19), who reported significant increases in evaluations of adjustment of both self and others after self-esteem stress. It is possible that changes similar to those found by Levanway did in fact occur within stressed subjects in this study, but not to such an extent as to be reflected in the analysis, i.e., the stressed groups may have defended against lowered self evaluations to the extent that they reported heightened self perceptions which resulted in adjustment scores which were comparable to the control groups who were not expected to change.

Another possible explanation for the apparent contradiction between these results and those of Levanway may be found in procedural differences. Levanway utilized a method which was more apt to point up any changes in perceptions of self and others following stress than was used in this study. In Levanway's study, all Ss were administered the three measures as a group in the before-stress phase, and then following self-esteem stress, were administered the same three measures a second time, this time individually. The

fact that each S received each measure twice has the advantage that any change in self or other perceptions are immediately evident and possible magnified.

A disadvantage, however, is also evident, i.e., the possibility of practice effects, which may result in altered scores from what would have been found after stress had S not received the same measure prior to stress. This study, while controlling for practice effects, was not as precise as Levanway's in observing differences in the individual's self perceptions after stress. The emphasis here was on differences between groups, i.e., stress and non-stress groups; and, in effect, the two studies were measuring different factors. Levanway measured changes within the individual subject and this study measured differences between treatment groups.

Another possible reason for differences in results is suggested by the fact that Levanway used a relatively unknown personality measure as his source of self-esteem stress, i.e., the pattern of words recalled by the subject; this study utilized a personality measure which has received a certain amount of popular attention and which may have affected the manner in which the subjects reacted, i.e., either to increase or decrease their attempts to deny the validity of the stress.

An additional procedural difference between this study and that of Levanway should be noted. Subjects in this study were given a written evaluation of their Rorschach protocols. This written report served as the self-esteem stress in the case of the stress group, and was read by the subject as a

a member of a group and with no direct contact between the experimenter and the subject. Levanway, on the other hand, administered the self-esteem stress orally and individually to each subject. This suggests two further areas of study; first, what effect will a written presentation of stress have as compared to an orally presented stress, the latter case in which the subject is face to face with the stressing individual while in the former, he is more or less removed from the stressing person. Secondly, what is the effect of being stressed while a member of a group of persons receiving an unknown evaluation of themselves as compared to receiving stress individually without the knowledge that others are also being evaluated.

As suggested above in the discussion of the apparent contradiction between these results and those of Doris and Sarason (8), it may be that the treatments of anxiety level and self-esteem stress combine to produce an effect in a subject even though this is not evident from these results. Possibly, the tests were not adequate for revealing changes due to stress. This suggestion is also based on the correlation of .68 for the HA stress group between the differences between their self and other scores and the extent to which they accepted the stressful Rorschach evaluation. This correlation was significant at the .01 level of confidence, while similar correlations for the other three groups failed to be significant.

There appear to be several important aspects of this finding. First, although the four treatment groups did not

differ significantly from each other in the extent to which they accepted the Rorschach evaluation, there was nevertheless a range from very high acceptance to low acceptance within each group. Second, the HA stress subjects, as a group, tended to perceive a greater difference between the adjustment of self and the adjustment of others than did the other three groups. The correlation of .68 for the HA stress group between this difference and the subject's degree of acceptance of the Rorschach evaluation indicates that the subjects of this group who gave the highest rating to the evaluation, also saw others as more adequately adjusted compared to themselves. Subjects of this group who accepted the evaluation less completely did not perceive such a difference between their adjustment and that of others. Whether or not a HA stressed person reacts differently from others may depend on how well the person accepts the stress to her self-esteem. If she should accept this as being correct and valid, then she might be expected to perceive others as better adjusted than herself, than she would if she did not accept the evaluation.

It should be noted that a cause-effect relationship is by no means being suggested for this relationship. The reverse is equally possible, i.e., a person who perceives herself as rather poorly adjusted, may tend to be more acceptant of a negative, or stressful evaluation of her adjustment than would a person who perceives herself as being well adjusted.

This question of the subject's acceptance of the self-esteem stress has been largely overlooked in the literature. Lazarus et al (19) point out the importance of the subject's

motivation to maintain his present level of self-esteem. The question of acceptance by the subject of self-esteem stress goes a point further, that is, it considers the motivation of the subject. That is, it does not appear sufficient to stress an individual with respect to his self-esteem alone. It is equally important to know how much he values, or is motivated to maintain, his present level of self-esteem. If he is highly motivated to maintain his present level of self-esteem, he may not accept it, or if he does accept it, he will be more disturbed by this stress to his self-esteem than someone who has the same level of self-esteem but who is not so highly motivated to maintain it.

A similar suggestion is made by Fey (9), who found that subjects who are less accepted by others tend to be less accepting of others. Fey reports that this rejection-projection trend, as he calls it, was by no means a pure one and he feels that many other variables are involved. Fey suggests that the motivating factors are not controlled when we merely ask an individual if he accepts himself. His attempt, therefore, like that of this study, to test Rogerian theory was not successful, possibly because of this question of subject motivation.

Once again, a cause-effect relationship is not being suggested. Two major possibilities, however, appear to be evident. It may be that a HA person who accepts a stressful evaluation of his adjustment, will tend to be affected by this so that he regards himself as being poorly adjusted relative

to others. It is equally possible however, that a HA person who regards himself as being poorly adjusted relative to others, will tend to accept a negative evaluation of his adjustment level. This appears to be a promising area for future research.

SUMMARY

The present study investigated the effects of two variables, manifest anxiety and self-esteem stress, and their interactions upon the perceptions of self and others. Two levels of these variables were used in a 2 x 2 x 2 mixed analysis of variance design with nine undergraduate female subjects in each cell.

Level of anxiety was operationally defined by scores on the Taylor Manifest Anxiety Scale. This was administered to 400 subjects and served as the initial basis for selection of subjects, i.e., subjects were drawn from the upper and lower twenty-five percent limits of this scale. Following the selection of subjects from these limits, certain subjects were excluded due to personal or administrative reasons. Following this selection, thirty-six subjects were included in the experiment.

The thirty-six subjects selected to serve in the experiment met for two sessions; in the first of which all were tested with the group Rorschach test. In the second session, the subjects performed a "Q" adjustment sort for themselves and for others.

At the end of the first session, the subjects were informed that their Rorschach records were to be evaluated by clinical psychologists for their "level of adjustment" in order that the experimenter might select some of them for a future experiment. The subjects were also told at that time that each would be given a "confidential" report of the

psychologists' findings. The "high anxiety" and "low anxiety" groups were each randomly divided into a stress, or experimental group, and a control group.

In the second session, a negative and neutral evaluation, both of which were bogus, served as the stress and control evaluations respectively.

Perceptions of self and others were obtained by means of an adjustment "Q" sort, in which the subjects sorted seventy-four statements on a "like-me"-unlike-me", six point scale from -3 to +3. The sort was also performed by each subject indicating whether the same seventy-four statements were like or unlike the "average" person.

Following the experiment proper, each subject was informed of the nature and purpose of the experiment in order to insure that no subject would leave the experiment with any incorrect impressions of her adjustment as a result of the experiment.

The results indicated that in this experiment, anxiety level and self-esteem stress did not have effect on the perception of the adjustment of self and others. Neither anxiety level, self-esteem stress nor their interactions had significant effect on these perceptions.

A correlation for the high anxiety stress group, between self and other adjustment scores and the subject's rating of acceptance of the Rorschach interpretation, was significant at the .01 level of confidence. This correlation for the high anxious stress group indicated that subjects in this group who accepted the bogus evaluation of their Rorschach protocol, also tended to perceive themselves as more poorly adjusted

relative to others than did subjects who did not accept the bogus evaluation as highly. Similar correlations for the other three groups in this experiment were not significant.

The importance of the above correlation for future research was discussed in the previous section in terms of the motivation of the subject. It was concluded that while anxiety and stress did not appear to affect perceptions of self and others, either singly or in combination, it may be that they combine to have an effect when the subject's acceptance of the stress is taken into account.

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APPENDIX A

Stress Evaluation

An analysis of your Rorschach indicates that you are a fairly average person but have important shortcomings. You are not doing as well as you could intellectually due to some emotional difficulties. This is, of course, unfortunate because you really have good ability. At times, this makes you feel inferior to some of your classmates, angry with yourself, and envious. You will frequently lose patience, end up doing things in a slipshod manner, and then feel moody and irritable. You also avoid competing with others and become distressed over failures instead of taking them in stride. For example, you feel anxious and insecure when meeting important people, taking examinations, and so on. In such situations, you are always anxious about making a good impression.

Emotionally, you get along well with other people, but you do not have many really close relationships. You have a distinct need to have other people like you and admire you, but you often feel an insufficient amount of attention is given you. This occurs both in your family and with your friends, and leaves you feeling lonely and moody. You thus avoid being alone with nothing to do. Unfortunately, you have spoiled a number of significant relationships by saying or doing the wrong thing, or by not being sensitive to the needs of the other person involved. Part of this is due to the fact that you feel very antagonistic to quite a few people. This makes you anxious because you feel guilty and vulnerable to rebuke. As a result, you try to control your feelings so that they will not show through, and have become oversensitive to critical remarks supposedly directed against you. Your sexual adjustment is also a definite problem which is difficult to resolve. Your Rorschach suggests severe conflict in this area.

I would not worry about the above emotional difficulties, but they do cut down on what you can accomplish and isolate you from many potential relationships. Instead of doing things, you tend to daydream. You avoid volunteering for many activities because of possible failure and ridicule. You find it difficult to concentrate at times, and frequently have doubts as to whether or not you have made the right decision. Some of the above patterns should be modified if you are to get the most enjoyment out of life and make an adequate social and sexual adjustment.

APPENDIX B

Neutral Evaluation

An analysis of your Rorschach record indicates that your emotional, social and intellectual adjustment is similar to that of the average, normally adjusted individual of your age and intelligence. Apparently, you are aware to the same degree as the normal individual, of the social and cultural standards essential for adaptation to your environment.

As you may know, this test is primarily a means of evaluating the degree of your emotional disturbance. With reference to your personality and characteristics, you do not manifest any sign of emotional disturbance or of social maladjustment. On the other hand, this does not mean that you are very well adjusted or that you apparently possess any really disturbing personality characteristics. Finally, your emotional life probably has the same number of ups and downs as that of the average adjusted individual of your age and intelligence.

APPENDIX C

Stress Questionnaire

Please indicate if anything unusually distressful has occurred to you within the past 1-2 months. To indicate this, write either "yes" or "no" at the bottom of your test answer sheet. If you answer "yes", indicate the number (or numbers) of the item (or items) which applies to you. Your responses will, of course, be confidential, being used only for research purposes.

Specifically, has any of the following occurred:

1. Illness or accident in the family
2. Separation of parents
3. Very severe family quarrel
4. Separation from fiancée or steady boy-friend
5. Illness or physical upset to yourself within the past 2-3 days
6. Anything else which has you particularly upset at the present time.

APPENDIX D

Instructions

Sort these cards to describe yourself as you see yourself today, from those that are least like you to those that are most like you.

Sort the cards that are like you so that under 3 (very much like-me) you will place two cards; under 2 (moderately like-me) you will place ten cards; and under 1 (a little like-me) you will place twenty-five cards.

Sort the cards that are unlike you in the same way that you sort the cards that are like you.

Sort the cards that are unlike you so that under -3 (very much unlike-me) you will place two cards; under -2 (moderately unlike-me) you will place ten cards; and under -1 (a little unlike-me) you will place twenty-five cards.

Instructions

Sort these cards to describe the average person as you see that person today, from those that are least like the average person to those that are most like the average person.

Sort the cards that are like the average person so that under 3 (very much like-the average-person) you will place two cards; under 2 (moderately like-the average-person) you will place ten cards; and under 1 (a little like-the average-person) you will place twenty-five cards.

Sort the cards that are un-like-the average-person in the same way that you sort the cards that are like the average person.

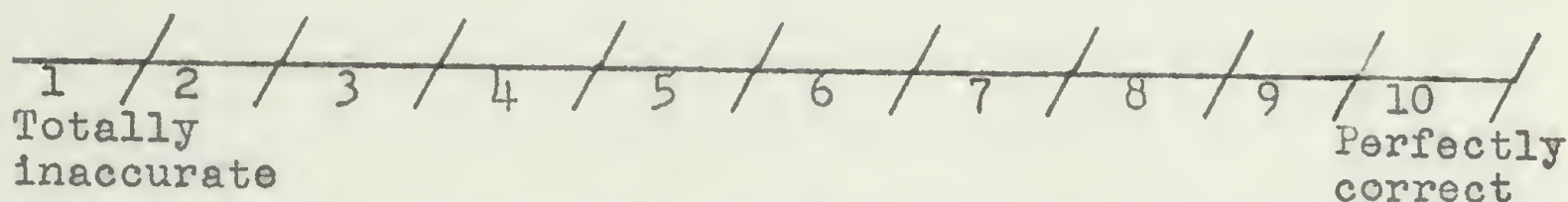
Sort the cards that are unlike-the average-person so that under -3 (very much unlike-the average-person) you will place two cards; under -2 (moderately unlike-the average-person) you will place ten cards; under -1 (a little unlike-the average-person) you will place twenty-five cards.

APPENDIX E

Rorschach Rating Questionnaire

On the graph below please rate how well the interpretation of your Rorschach record describes you.

As you see there are ten blocks on the graph, from 1 to 10. A check in block 1 would indicate that you feel the interpretation was totally inaccurate and totally unlike you, while a check in block 10 would indicate that the interpretation was perfectly correct and exactly like you. Place a check in one of the blocks from 1 to 10 to indicate how accurate (or inaccurate) the evaluation was in describing you.



Now that you have rated how well the interpretation of your Rorschach describes you, please write below your feelings and thoughts about this interpretation. If you need additional room, you are free to write on the reverse side of this paper. Please understand that this description of your feelings will be kept anonymous, therefore, do not put any identifying marks of any kind on your paper. We are not interested in the individual's answers as such; we are instead interested in how well the Rorschach interpretation agrees with how people feel about themselves.

APPENDIX F

"Q" adjustment scores for self and others and subject's rating of Rorschach interpretation of "high anxious" and "low anxious", stressed and non-stressed subjects

<u>Stress</u>					
<u>Self</u>	<u>High anxious</u> <u>Other</u>	<u>Rating</u>	<u>Self</u>	<u>Low anxious</u> <u>Other</u>	<u>Rating</u>
22	49	9	55	58	8
32	62	10	62	58	5
70	66	3	62	50	5
42	42	7	68	64	8
56	68	9	66	66	8
64	58	9	54	58	9
60	68	8	48	58	7
60	62	6	30	70	9
52	62	9	54	60	4
<u>Non-stress</u>					
<u>Self</u>	<u>High anxious</u> <u>Other</u>	<u>Rating</u>	<u>Self</u>	<u>Low anxious</u> <u>Other</u>	<u>Rating</u>
48	56	9	52	66	5
48	64	8	59	64	9
64	62	7	59	63	8
60	64	8	66	58	8
38	54	8	70	62	8
62	60	9	62	38	10
62	66	10	64	66	10
58	52	9	66	62	9
52	52	7	42	60	8

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